**Explorations of Technology – Final Project**

**220 Points**

Description – This project will serve as a huge part of your marking period grade. For seniors, it will also serve as your final exam. Seniors, if you would like to use an exam exemption, it will **NOT** exempt you from the 220 point marking period grade, only the exam grade it would have on your final grade.

This project will focus on the several aspects of the course that we have explored.

**Part I. Block Letter Announcing your Topic Choice. (15 Points)**

Here you will choose a topic for your final project. The topic should be something that is a source of interest and enjoyment for you. Previously, students have chosen a favorite video game, tv show, movie, musical artist or hobby. However, if you wish to go in another direction, as long as the topic is school appropriate, go with it!

The letter should be addressed to Mr. William Dixon. Use the High School’s address, (as you did with your letter to Mr. Bakri). The letter should have three paragraphs, properly formatted in MLA Simple Block Letter Format. The first paragraph should introduce yourself and your topic for your project. The second and third paragraphs should provide two reasons why you’ve chosen this topic over all others. Be sure to print and sign (black ink) the letter.

**Part II. Javascript Drawing (Khan Academy) (30 Points)**

Here you will create a detailed Javascript drawing on your particular topic. It could be a particular character from a game, movie, show or book. It could be a scene from either of the above. It must simply be on topic and include the following elements:

* Text showing your name (By XXX) in the bottom right corner of your javascript drawing
* Your drawing must include the following commands at least one time each:
  + fill, stroke, background
  + rect, ellipse, line, triangle, arc
  + text, textFont
  + beginShape()….endShape() – (Polygons)
* Your drawing will be drawn on khanacademy and your account must be linked to my class code: TEQSCC
* Name your javascript drawing: Final Project Drawing

**Part III. Computer Programming (50 Points)**

You will be revisiting code.org and working on Course 3 there. Make sure you are logging into your account from the appropriate class page. The section code is XFDMNH. You will be skipping any “Unplugged” activities. The following Lesson numbers should be accomplished: 2, 3, 5, 6, 7, 8, 11, 12, 13, 14, 15, 16, 17, 21

In these lessons there are a total of 158 levels to build. You must accomplish a total of 100 levels in any of these Lessons to completely satisfy this part of the project requirement. Each level completed is worth ½ point.

**Part IV. Flyer (25 Points)**

Create a flyer in Microsoft Word that announces your new website, which will focus on your chosen topic. The flyer should be created with various features and elements used in the Military and babysitting flyers produced earlier in class. You will be graded based on the overall organization and beauty of the flyer. There should be a splash of color, images and text that satisfactorily advertise your website. (Part V).

**Part V. Website (50 Points)**

This will be a 5 page website that focuses on your chosen topic. There should be an opening page that introduces your topic, with hyperlinks to your other pages. The following elements must be included in your website. (not on every page, but appearing at least once within the website itself).

* Images
* Animated GIF (created by you in Part VI)
* Hyperlinks to other pages (and back to home page)
* Bulleted List
* Font Change, Font Color Change
* Background color change
* Superscript or a subscript
* Bold, italicize, underline, Strikeout (once each)
* Centering
* Appropriate Titles for Each Page

**Part VI. Fireworks, Drawing and Animated GIF (30 Points)**

In Fireworks, created your own animated GIF, which will be used in your website (Part V). The following conditions are required:

* The GIF must have at least 5 Stages.
* The GIF must be of your own creation.
* The individual drawings need to be more than a simple bouncing ball in this one. Try to recreate a short, significant scene, or action from your chosen topic. For example, if you chose Harry Potter for your topic, you might create an animated GIF of the sorting hat choosing Griffindor for Harry. If you chose Minecraft for your topic, you might create an animated GIF of a Creeper exploding.
* Remember to place it in the same folder as the HTML page that will display it.
* The individual drawings don’t need to be as detailed as our Spongebob drawings, but should be more than stick figures.

**Part VII. Number Conversions (20 Points)**

Show your ability to convert between decimal, binary and hexadecimal by filling out the attached Number Conversion document. In it your will produce the binary and hex equivalents for the numbers 1 to 100. If you pay attention to the patterns, this can be a very quick and easy 20 points. To earn these points, your numbers must be handwritten.

**Project Scoring Breakdown**

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| --- | --- |
| **Project Topic** | **Points Possible** |
| Block Letter | 15 |
| Javascript Drawing | 30 |
| Computer Programming (Code.Org) | 50 |
| Website Flyer (Microsoft Word) | 25 |
| Website (HTML) | 50 |
| Fireworks/Animated GIF | 30 |
| Number Conversions | 20 |
| **Total Points** | **220** |

For seniors, this is due before your last day of school.

\*\*Reminder – This is a marking period grade of 220 points and your final exam, Seniors. Your exam exemption will not cover the marking period grade!